



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

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## Ritemvia (*rituximab*)

An overview of Ritemvia and why it is authorised in the EU

### What is Ritemvia and what is it used for?

Ritemvia is a medicine used to treat the following blood cancers and inflammatory conditions:

- follicular lymphoma and diffuse large B cell non-Hodgkin's lymphoma (two types of non-Hodgkin's lymphoma, a blood cancer);
- granulomatosis with polyangiitis (GPA or Wegener's granulomatosis) and microscopic polyangiitis (MPA), which are inflammatory conditions of the blood vessels;
- moderate to severe pemphigus vulgaris, an autoimmune disease characterised by widespread blistering and erosion of the skin and mucous membranes (moist body surfaces, such as the lining of the mouth). 'Autoimmune' means that the disease is caused by the immune system (the body's natural defences) attacking the body's own cells.

Depending on the condition it is used to treat, Ritemvia may be given with chemotherapy (other cancer medicines) or medicines used for inflammatory disorders (corticosteroids). Ritemvia contains the active substance rituximab.

Ritemvia is a 'biosimilar medicine'. This means that Ritemvia is highly similar to another biological medicine (the 'reference medicine') that is already authorised in the EU. The reference medicine for Ritemvia is MabThera. For more information on biosimilar medicines, see [here](#).

### How is Ritemvia used?

Ritemvia can only be obtained with a prescription. It is given by infusion (drip) into a vein. Before each infusion, the patient should be given an antihistamine (to prevent allergic reactions) and an antipyretic (a medicine to reduce fever). Depending on the condition being treated, patients may receive other medicines as well. Ritemvia should be given under the close supervision of an experienced healthcare professional and in a place where facilities for resuscitating patients are immediately available.

For more information about using Ritemvia, see the package leaflet or contact your doctor or pharmacist.

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## How does Ritemvia work?

The active substance in Ritemvia, rituximab, is a monoclonal antibody (a type of protein) designed to attach to a protein called CD20 present on the surface of B cells (types of white blood cells). When rituximab attaches to CD20, it causes the death of B cells, which helps in lymphoma, where B cells have become cancerous. In pemphigus vulgaris, GPA and MPA, destroying the B cells reduces the production of antibodies thought to play an important role in attacking the blood vessels and causing inflammation.

## What benefits of Ritemvia have been shown in studies?

Laboratory studies comparing Ritemvia with MabThera have shown that the active substance in Ritemvia is highly similar to that in MabThera in terms of structure, purity and biological activity. Studies have also shown that giving Ritemvia produces similar levels of the active substance in the body to giving MabThera.

In addition, Ritemvia has been compared with MabThera given into a vein in a main study involving 372 patients with active rheumatoid arthritis (an inflammatory disease). The study showed that Ritemvia and MabThera had comparable effects on arthritis symptoms: after 24 weeks, the proportion of patients with a 20% improvement in symptom score (called ACR20) was 74% (114 of 155 patients) with Ritemvia and 73% (43 of 59 patients) with MabThera.

Further evidence came from supportive studies including one involving 121 patients with advanced follicular lymphoma, where adding Ritemvia to chemotherapy medicines was at least as effective as adding Rituxan, the US version of MabThera. In this study improvement was seen in 96% of cases (67 of 70 patients) with Ritemvia and 90% (63 of 70 patients) with Rituxan.

Because Ritemvia is a biosimilar medicine, the studies on effectiveness and safety of rituximab carried out with MabThera do not all need to be repeated for Ritemvia.

## What are the risks associated with Ritemvia?

The safety of Ritemvia has been evaluated and, on the basis of all the studies, its side effects are considered comparable to those of the reference medicine MabThera.

The most common side effects with rituximab are reactions related to the infusion (such as fever, chills and shivering) which occur in most cancer patients and in more than 1 in 10 patients with GPA or MPA at the time of the first infusion. The risk of such reactions decreases with subsequent infusions. The most common serious side effects are infusion reactions, infections and, in cancer patients, heart-related problems. Other serious side effects include hepatitis B reactivation (return of previous active liver infection with hepatitis B virus) and a rare and severe brain infection known as progressive multifocal leukoencephalopathy (PML). For the full list of side effects of Ritemvia, see the package leaflet.

Ritemvia must not be used in people who are hypersensitive (allergic) to rituximab, mouse proteins or any of the other ingredients. It must also not be used in patients with a severe infection or a severely weakened immune system. Patients with GPA, MPA or pemphigus vulgaris must also not receive Ritemvia if they have severe heart problems.

## Why is Ritemvia authorised in the EU?

The European Medicines Agency decided that, in accordance with EU requirements for biosimilar medicines, Ritemvia has a highly similar structure, purity and biological activity to MabThera and is distributed in the body in the same way. In addition, a study comparing Ritemvia to MabThera in patients with rheumatoid arthritis (which can support its use in other inflammatory disorders such as GPA and MPA) showed that both medicines are similarly effective, and a supportive study in follicular lymphoma showed effectiveness in cancer.

All these data were considered sufficient to conclude that Ritemvia will behave in the same way as MabThera in terms of its effectiveness and safety in its authorised uses. Therefore, the Agency's view was that, as for MabThera, the benefits of Ritemvia outweigh the identified risks and it can be authorised for use in the EU.

## What measures are being taken to ensure the safe and effective use of Ritemvia?

The company that markets Ritemvia will provide doctors and patients using the medicine for non-cancer conditions with educational material including information on the need to give the medicine where facilities for resuscitation are available and on the risk of infection, including PML. Patients are also to receive an alert card, which they are to carry at all times, instructing them to contact their doctor immediately if they have any of the listed symptoms of infection.

Doctors prescribing Ritemvia for cancer will be provided with educational material reminding them of the need to use the medicine only by infusion into a vein.

Recommendations and precautions to be followed by healthcare professionals and patients for the safe and effective use of Ritemvia have also been included in the summary of product characteristics and the package leaflet.

As for all medicines, data on the use of Ritemvia are continuously monitored. Side effects reported with Ritemvia are carefully evaluated and any necessary action taken to protect patients.

## Other information about Ritemvia

Ritemvia received a marketing authorisation valid throughout the EU on 13 July 2017.

The full EPAR for Ritemvia can be found on the Agency's website:  
[ema.europa.eu/medicines/human/EPAR/ritemvia](http://ema.europa.eu/medicines/human/EPAR/ritemvia)

This overview was last updated in 10-2020.